

## Factor Xa Inhibitors

Mechanism of Action: This medication class blocks the action of Factor Xa, a blood protein that causes the formation of blood clots.

Medications	Dosing/Applications	Side Effects	Drug Interactions	Warnings/Contraindications	Additional Information
Rivaroxaban <a href="#">(Xarelto)</a>	<p>(Avoid if creatinine clearance is less than 30 mL/min)</p> <p>Prevention of stroke and blood clots in patients with nonvalvular atrial fibrillation 15 or 20 mg daily with evening meal</p> <p>Prevention of blood clots in leg veins (deep vein thrombosis or DVT) and in the lungs (pulmonary embolism or PE): 10 mg daily. Use for 12 days after knee replacement surgery or 35 days after hip surgery.</p> <p>Treatment of DVT or PE: 15 mg twice daily for 21</p>	<p>Common: Bleeding, dizziness, fainting, rash, blisters, fainting, muscle spasm, and bruising.</p> <p>Serious: Major bleeding and severe allergic reactions.</p>	<p>Drugs that cause increased levels of Xarelto and may cause bleeding: Ketoconazole, Norvir (ritonavir), Kaletra (lopinavir/ritonavir), Crixivan (indinavir), Biaxin (clarithromycin), Erythromycin, Diflucan (fluconazole), Sporanox (itraconazole)</p> <p>Drugs that cause the breakdown of Xarelto in the liver and may reduce its effect: Rifampin, St. John's Wort, Tegretol (carbamazepine), Dilantin (phenytoin).</p> <p>Medications that may</p>	<p>Bleeding, liver impairment, renal impairment, valvular disease, elderly patients, and surgery or invasive procedures.</p> <p><b>Black Box Warning (BBW):</b> Increased risk of clots if Xarelto is stopped suddenly</p> <p>Spinal/epidural bleeding with anesthesia/spinal puncture</p> <p>Pregnancy category: C</p>	<p>Cost: \$27 per 10 mg tablet</p> <p>Antidote: None.</p> <p>Off-label use: activated prothrombin complex concentrate (PCC) or Recombinant factor VIIa (rFVIIa), or activated charcoal within 2 hours.</p> <p>Dose dependent on kidney function.</p>

	days, then 20 mg once daily for the remaining treatment period.		increase risk of bleeding: Aspirin, NSAIDs (ex. Ibuprofen, naproxen), warfarin, heparin, Plavix (clopidogrel), effient (prasugrel), Brilinta (ticagrelor)		Discontinue $\geq 24$ hours prior to surgery
Apixaban ( <a href="#">Eliquis</a> )	<p>Prevention of stroke and blood clots in patients with nonvalvular atrial fibrillation 5 mg orally twice daily</p> <p>The recommended dose is 2.5 mg twice daily for patients with <math>\geq 2</math> of the following: Age <math>\geq 80</math> years Weight <math>\leq 60</math> kg Serum creatinine <math>\geq 1.5</math> mg/dL</p> <p>Prevention of DVT or PE after hip or knee surgery: 2.5 mg twice daily for 12 days after knee replacement surgery or 35 days after</p>	<p>Common: bruising, bleeding, nausea, anemia</p> <p>Serious: severe allergic reactions and active bleeding</p>	<p>Drugs that cause increased levels of Eliquis and may cause bleeding: Ketoconazole, Norvir (ritonavir), Biaxin (clarithromycin), Diflucan (fluconazole), Sporanox (itraconazole)</p> <p>Drugs that cause the breakdown of Xarelto in the liver and may reduce its effect: Rifampin, St. John's Wort, Tegretol (carbamazepine), Dilantin (phenytoin).</p> <p>Medications that may increase risk of bleeding: Aspirin, NSAIDs (ex.</p>	<p>Bleeding, nausea, anemia, bruising, liver impairment, elderly patients, and surgery or invasive procedures.</p> <p><b>BBW:</b> Increased risk of clots if Eliquis is stopped suddenly</p> <p>Pregnancy category: B</p>	<p>Cost: \$5 per 5 mg tablet</p> <p>Antidote: None. Off-label use: May use PCC, rFVIIa, or activated charcoal within 2 hours.</p> <p>Discontinue 24 to 48 hours before surgery</p>

	hip replacement surgery.		Ibuprofen, naproxen), warfarin, heparin, Plavix (clopidogrel), effient (prasugrel), Brilinta (ticagrelor)		
Fondaparinux <a href="#">(Arixtra)</a>	(Use with caution if creatinine clearance is 30 to 50 mL/min. Do not use in creatinine clearance < 30 mL/min.)  DVT and PE prevention: Weight ≥ 50 kg only  DVT and PE treatment: Weight < 50 kg is 5 mg (sq) subcutaneously daily Weight 50 to 100 kg is 7.5 mg sq daily Weight > 100 kg is 10 mg daily	Common: Bruising, bleeding, injection site reactions, anemia, increased wound drainage, and nausea.  Serious: Active bleeding, thrombocytopenia, hematoma, post-operative hemorrhage.	Drugs that cause increased levels of Arixtra and may cause bleeding:  Medications that may increase risk of bleeding: Aspirin, NSAIDs (ex. Ibuprofen, naproxen), warfarin, heparin, Plavix (clopidogrel), effient (prasugrel), Brilinta (ticagrelor)	Bleeding, thrombocytopenia, renal impairment, and elderly patients.  Not recommended in patients who underwent percutaneous coronary intervention.  <b>BBW:</b> Spinal/epidural bleeding with anesthesia/spinal puncture  Pregnancy Category: B	Cost: \$492.79 for 5 mg/0.4 mL syringes (#10)  Antidote: None. Off-label use: May use PCC or rFVIIa.  Discontinue 24 hours prior to surgery.
Edoxaban (Lixiana) is available in Japan					
Betrixaban and Idraparinux are currently in development.					